Responsiveness Summary
for
Comments Received During Public Notice Regarding
Proposed Air Quality Permit No. 1000106
SRP - Coronado Generating Station
February 3, 1999

The following comments were submitted by SRP through their letter dated December 23, 1998.

Comment 1: Operating Scenarios: Fuel Limitation / Definition of Fuel Type

The permitting requirements of A.A.C. R18-2- R18-2-306.A.12 stipulate that the Title V permit must contain terms and conditions for reasonably anticipated operating scenarios. CGS's Unit 1 and Unit 2 primarily burn coal to generate electricity. Fuel oil is used to start-up the units and for flame stabilization. The normal startup and operating procedure is to operate on oil fires until the unit is on line at approximately 10 MW. Then with all igniters in operation a ball mill is started at minimum feeder speed. The igniters are kept in for 30 to 45 minutes until the mill peaks. Most of the igniters are then shut down and oil fires no longer have a significant impact on heat input.

Flame stabilization is periodically necessary and typically requires four oil fired igniters. During flame stabilization, oil firing contributes less than 0.1% to the total heat input to the unit. The draft revised Part 70 regulations propose a definition for alternate operating scenarios: *terms or conditions in a part 70 permit, including those resulting from advanced approvals, which assure that different modes of operation comply with the applicable requirements relevant to each mode of operation*. Given that contribution to heat input from flame stabilization is insignificant, SRP therefore proposes to specify the following operating scenarios (fuel types) in the permit:

a) Coal firing (including occasional oil firing for flame stabilization)
b) Oil firing (including used oil, used oil fuel, blended oil and virgin oil)
c) Co-firing fuel oil and coal during startup until the first ball mill reaches peak and most igniters are shut down, and when shutting down the last ball mill
d) Co-firing used oil and coal during startup until the first ball mill reaches peak and most igniters are shut down, and when shutting down the last ball mill

Response 1: There is no exemption in Subpart Dc regarding oil firing for flame stabilization, therefore no change to the coal firing fuel limitation has been made. Oil firing (fuel oil number two and used oil fuel) has been added to the permitted types of fuel.

Comment 2: Averaging Period for PM Monitoring Requirement

During the July 30, 1998 SRP / ADEQ permit negotiation meeting, SRP requested consideration for a daily averaging period for the PM monitoring requirement due to current limitations in the monitoring protocol. ADEQ indicated that the averaging period would be changed to daily. The continuous opacity monitors (COMS) are designed to measure opacity every 10 seconds. CGS' Entertec data acquisition system (DAS) then calculates 1 minute, 6 minute and daily (midnight to midnight) averages. The proposed permit condition for particulate matter monitoring, Permit Condition III.E.2 of Attachment B, stipulates calculation of a 24 hour rolling average, which requires changes to the DAS. For the following reasons, SRP recommends a daily averaging period for the particulate matter periodic monitoring requirement:

a) the existing DAS currently calculates a daily average
b) the trigger for corrective action is 15% opacity, significantly less than the opacity

standard, and

c) investigation of the control equipment is not required until 24 hours after the trigger.

Response 2: The requested change has been denied. It is the in-house policy of the ADEQ to require a 24 hour rolling average. The 24 hour rolling average is more stringent than the daily average.

Comment 3: Timeline for Compliance Certification

Permit condition VII.A of Attachment A (Compliance Certification) requires compliance certification submittals no later than April 15th and October 15th for the respective prior 6 months. The first compliance certification, however, will only reflect CGS' compliance status from the effective date of the permit to the end of the relative compliance period. The permit condition should be revised to allow for this exception with the initial certification.

Response 3: The requested change has been made. Attachment “A”, Section VII.A

Comment 4: Size based and Application based Paint Exemptions

Maricopa County has adopted and implemented comprehensive regulations for architectural coatings and spray painting applications to support the County's efforts in achieving compliance with National Ambient Air Quality Standards for Ozone. The architectural rule limits the VOC content of paints but exempts certain special use coatings; similarly, the spray-painting rule exempts large items from the enclosure requirement. The State of Arizona's regulatory definition of architectural coating is so broad and generic that it provides limited options for regulatory-based flexibility. Maricopa County's rules have been designed for an Ozone nonattainment area, evaluated by EPA and the public, and should establish precedence for applicability exemptions. To make the state rule more technically feasible, SRP is therefore proposing the following size based and special use exemptions established by Maricopa County's regulations.

Size based Exemption
The following activities are exempt from the spray enclosure requirements:

1. The spray coating of buildings or structures with dimensions greater than 10' W X 25' L X 8' H, including appurtenances and any other ornamental objects that are not normally removed prior to coating. Buildings less than 10' W X 25' L X 8' H which are fixed in a permanent location and cannot easily be moved into an enclosure or spray booth are also exempt.

2. Enclosures and spray booths located entirely in a completely enclosed building providing that any vents or openings do not allow overspray to be emitted into the outside air.

3. Coating operations utilizing only hand held aerosol cans.

Special Use Exemption
Architectural coatings for specific uses, such as fire retardant coatings, metallic pigmented coatings, and coatings for use in highly aggressive environments, shall be exempt from I.H.2.b

Response 4: Size Based Exemptions

1. There is no need to give a size exemption for buildings or structures since architectural coating is exempt from the requirements of A.A.C. R18-2-727. Architectural coating is defined as "a coating used commercially or industrially for residential, commercial or industrial buildings and their appurtenances...".

2. A.A.C. R18-2-727.A requires spray painting operations to be conducted in an enclosed area equipped with controls containing no less than 96% of the overspray. Conducting spray painting operations in a completely enclosed building would qualify under this section.

3. Hand held aerosol cans are considered spot painting, and are therefore exempt from A.A.C. R18-2-727.

Special Use Exemption

Currently, there are no rules that cover exemptions to architectural coatings for specific uses. Any request for the use of a photochemically reactive solvent that does not comply with A.A.C. R18-2-727.C would need to be presented to this Division on a case by case basis.

Comment 5: Acid Rain NO_x Limit

CGS Unit 1 and Unit 2 are classified as wall fired boilers. Pursuant to the Acid Rain requirements, the early election compliance plan for wall-fired boilers stipulates an annual average NO_x limit of 0.50 lb/mmBtu. Section II of Attachment F: Phase II Acid Rain Provisions needs to be revised as follows to reflect the accurate configuration of CGS and associated early election NO_x emission limits:

Pursuant to 40 CFR 76.8(d)(2), Arizona Department of Environmental Quality approves a NOx early election compliance plan for Unit 1. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, the unit's annual average NOx emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1) of 0.50 lb/mmBtu for wall fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(1), of 0.46 lb/mmBtu until calendar year 2008.

Pursuant to 40 CFR 76.8(d)(2), Arizona Department of Environmental Quality approves a NOx early election compliance plan for Unit 2. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, the unit's annual average NOx emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1) of 0.50 lb/mmBtu for wall fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(1), of 0.46 lb/mmBtu until calendar year 2008.

Response 5: The requested change has been made. Attachment “F”

Comment 6: Compliance with the Opacity Standard, Unit 1 and Unit 2

Pursuant to 40 CFR 60.11, compliance with the opacity standard shall be determined by conducting visual observations in accordance with Method 9. Regulatory history indicates that continuous opacity monitors were required to provide indications of the operation and maintenance of the pollution control device; Method 9 is used to determine compliance with the opacity limit. SRP proposes the following permit language to clarify the specific role of the continuous opacity monitor, as follows:

The continuous opacity monitor shall not be used to determine compliance with the numeric opacity limit, it shall be used as an indication of proper maintenance procedures for the control

device.

Response 6: The requested change has been denied. This language is ACE buster language and can not be added to the permit.

Comment 7: Mobile Sources

According to 40 CFR 70.3(c), permitting authorities shall include in the Title V permit all applicable requirements for all relevant emissions units in the major source. Emissions unit is further defined in 40 CFR 70.2 as any part or activity of a *stationary source* that emits or has the potential to emit any regulated pollutant. Mobile sources are not buildings, structures, facilities or installations (definition of stationary source). Furthermore, the mobile source requirements are tailpipe standards, rather than stationary source limitations. Therefore, the mobile source requirements of R18-2-801, 802 and 804 should be removed from the permit.

Response 7: The requested change has been denied. Mobile sources are subject to certain applicable requirements, and these must be included in the Title V permit. Please see the analysis in the memo attached.

Comment 8: CEMs and COMs System Requirements

a) 40 CFR 60.46(d)(1) provides alternative reference methods and procedures for compliance testing requirements for electricity generating units. Permit condition IV.B.1 of Attachment A limits the reference method options for the diluent gas to oxygen. The CGS continuous emission monitoring system calculates the emission rate using CO_2 as the diluent gas instead of oxygen. SRP requests the inclusion of EPA approved reference method alternatives and compliance requirements, as specified in 40 CFR 60.46(d)(1), in permit condition IV.B.1 of Attachment A.

b) On September 23, 1998, EPA proposed amendments to the monitoring requirements for new source performance standards. One aspect of the proposed amendments bases the zero and span calibration levels on the applicable opacity standard. This proposed change confirms proper operation of the opacity monitor, on a daily basis. CGS is currently complying with the proposed standard and requests that the draft permit conditions III.E.1.d (2)(a) and III.E.1.c be revised to incorporate the new standard, as specified below.

Section 60.13 is amended by revising paragraph (d)(1) as follows:

[[Page 50828]]

Sec. 60.13 Monitoring requirements.

* * * * *

(d)(1) Owners and operators of continuous emission monitoring systems (CEMS's) installed in accordance with the provisions of this part, shall automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts (CD's) at least once daily. For CEMS's used to measure opacity in accordance with the provisions of this part, owners and operators shall automatically, intrinsic to the continuous opacity monitoring system (COMS), check the zero and upscale calibration drifts at least once daily. For a COMS, the acceptable range of zero and upscale calibration values shall be as defined in PS-1 in appendix B of this

part. Where an opacity standard of 10 percent or less, corrected to stack exit conditions, has been specified, a surrogate 10 percent opacity standard shall be used for determining the daily calibration values for the drift assessments required above. The zero and upscale value shall, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable PS in appendix B of this part. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified. For COMS's, the optical surfaces, exposed to the effluent gases, shall be cleaned prior to performing the zero and span drift adjustments, except for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

Response 8:

a) The requested change has been made, CO_2 has been added as a diluent gas. Attachment "B", Section IV.B.1.a and b.

b) The requested change has been made. Through conversations with Steve Frey of EPA Region 9, it is understood that the accuracy of the COMS should be maintained near the standard. The phrase "50 to 100% of span value" has been removed from paragraph III.E.1.d(2)(a) of Attachment "B".

Comment 9: Wind Speed Exemption

In previous comment submittals, SRP requested an exemption from the opacity monitoring requirement if the wind speed is greater than 10 mph. To accurately and effectively determine the opacity of fugitive emissions from coal handling, limestone handling and fly ash handling; the visual observation must be conducted under weather conditions that do not affect the compliance status. Although CGS actively utilizes dust suppressants, water trucks, baghouses and enclosures to control fugitive emissions, high winds are natural weather phenomena and can incorrectly indicate non-compliance. SRP re-iterates the request to include an exemption from the opacity monitoring requirement if the wind speed is greater than 10 mph.

Response 9: The requested change has been denied. The high wind speeds in the area should have been accounted for in the design of the coal, limestone and fly ash handling systems.

Comment 10: Used Oil, Used Oil Fuel and Blended Fuel Oil

CGS burns fuel oil in the auxiliary boiler and the main boiler's igniter guns. Fuel oil can consist of a combination of #2 diesel fuel, on-specification used oil and on-specification used oil fuel. The blended fuel oil is stored in a one million-gallon fuel oil storage tank. Pursuant to the current operating permit, up to 350 barrels of used oil can be burned annually. Prior to adding used oil or used oil fuel to the fuel oil tank, a representative sample is tested for chlorinated solvents. CGS also annually analyzes a representative sample of used oil or used oil fuel for arsenic, cadmium, chromium and lead.

To clarify the applicable requirements, SRP recommends the following changes to the draft permit conditions:

a) Revise the title of Permit Condition V of Attachment B to read:
Used Oil, Used Fuel Oil and Blended Fuel Oil

b) Add blended fuel oil to the Recordkeeping and Reporting requirements of Permit Condition V.C.2 of the draft permit conditions, as follows: Permittee shall maintain such

records as required to document the use of the above fuel including the following:

i) Dates on which used oil or used oil fuel *or blended fuel oil* was burned;
ii) Hours of usage of the used oil or used oil fuel *or blended fuel oil*; and
iii) The quantity of used oil or used oil fuel *or blended fuel oil* burned.

c) Specify the frequency of the annual testing requirement
A representative sample from each source of used oil or used oil fuel or *blended fuel oil* shall be tested *annually* for Arsenic, Cadmium, Chromium, and Lead using approved EPA methods prior to burning.

Response 10: a) & b) The requested changes have been denied. According to ARS 49.801.A.10, the 1996 edition, used oil fuel is defined as "used oil that is to be burned for energy recovery including fuel which is being produced from used oil by processing, blending or other treatment." Using this definition, used oil fuel and blended fuel oil are one and the same, and no changes to the permit are necessary.

c) The requested change has been made, the tests shall be conducted annually. Attachment "B", Section V.D.2.

Comment 11: Coal Handling and Fly Ash Handling Control Equipment (redline strike out)

Draft permit conditions II.B and II.D of Attachment B are inaccurate. Fugitive dust from the rotary car dumper is minimized by applying water to the coal as it's dumped from the rotary cars, the entrance to, and exit from, the rotary car dumper is not retrofitted with spray curtains. In addition, the fly ash handling system is configured such that fly ash from the units can be transported through one or both of the fly ash silos; therefore, only four of the ten baghouses needs to be in operation. Each permit condition should be revised as follows:

a) Coal Handling (permit condition II.B of Attachment B)When the coal handling system is operational, Permittee shall maintain and operate the eleven Johnson March baghouses used to capture particulate matter emissions associated with coal handling in accordance with manufacturer's specification and in a manner consistent with good air pollution control practices. Wet dust suppression shall be maintained and operated at the rotary car dumper during train unloading, at conveyor transfer points in the yard area, and at the stacking-reclaiming area. ~~Spray curtains shall also be maintained to control emissions at the entrance and exit to the rotary car dumper bay~~. [A.A.C. R18-2-306.A.2 and 331]

b) Fly Ash Handling (permit condition II.D of Attachment B)
When the fly ash handling system is operational, Permittee shall maintain and operate four of the ~~five~~ ten Flex-Kleen baghouses ~~per silo~~, and the mixer unloader used to ~~capture~~ reduce particulate matter emissions associated with fly ash handling in accordance with manufacturer's specification and in a manner consistent with good air pollution control practices. [A.A.C. R18-2-306.A.2 and 331]

Response 11: The requested changes have been made. Attachment "B", Sections II.B and D.

Comment 12: Permit Deviation Reporting

The proposed definition of, and reporting requirement for, permit deviations results in unnecessary and duplicative recordkeeping and reporting. According to the permit condition, included in the meaning of deviation are any of the following:

a) A condition where emissions exceeded an emission limitation or standard;

b) A condition where process or control device parameter values demonstrate that an emission limitation or standard has not been met;

c) Any other condition in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit.

Sub-definition A also defines an Excess Emission, which is subject to additional, more stringent notification requirements. Based on the current draft of the permit, if a continuous excess emission occurred, notification would be required within the first 24 hours (excess emission requirement), each additional 24 hour period (permit deviation requirement), and 72 hours from the first notification. The permit deviation requirement should be revised such that it is only triggered if the deviation is not subject to another recordkeeping or reporting requirement. This revision would ensure continued oversight by ADEQ and EPA, but decrease unnecessary reporting.

Response 12: The requested change has been denied. Excess emissions are determined through performance testing. A continuous excess emission (unless measured in a performance test) would be a permit deviation, and subject to the permit deviations reporting requirements. Also, the permit has been updated to reflect the most current language from Part 71. Attachment "A", Section XII.B.

Comment 13: Timing of Compliance Certifications

The six-month compliance certification period should correspond to existing requirements and coincide with CEM quarterly reporting requirements. The proposed timing for the semi-annual compliance certification adds a supplementary recordkeeping and reporting period to existing and continuing requirements. Furthermore, the timeframe falls in the middle of a quarterly CEM recordkeeping / reporting period. SRP recommends that the compliance certification cycle correspond to existing requirements, i.e. January to June and July to December.

Response 13: According to 40 CFR 60.19(d), if the permittee is required to submit periodic reports with established timelines to the State, the permittee may change the dates by which periodic reports shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the State and the Permittee.

Comment 14: Startup, Shutdown and Malfunction Exemption for Excess Emissions

Pursuant to 40 CFR 60.11(c), the New Source Performance Standard (NSPS) for opacity does not apply during periods of startup, shutdown and malfunction. In an effort to clarify and establish the conditions for startup, shutdown and malfunction, in SRP's July 24, 1998 comments, SRP proposed specific definitions for startup, shutdown and malfunction to be included in the permit. The SRP proposed definitions reflected SRP equipment and operating procedures and are consistent with definitions previously agreed to with ADEQ. ADEQ incorporated startup, shutdown and malfunction definitions in the current draft permit, however, the proposed definitions do not accurately reflect SRP's operations. SRP requests that the following definitions be included in the final operating permit:

STARTUP

Startup means the setting into operation of Coronado Generating Station (CGS) Unit 1 or Unit 2. The startup sequence begins with the start of CGS Unit 1 or Unit 2 induced draft fans. The electrostatic precipitators (ESP) of the respective unit shall be placed in service as soon as practicable after initial startup, but not until the ESP minimum inlet gas temperature remains at 550 degrees Fahrenheit for a period of one-half hour. If operations were reduced or curtailed as a result of excess opacity emissions or unit trip, the return of operations to the level at which the

unit was operating prior to reduction or curtailment shall be deemed to be startup.

SHUTDOWN

Shutdown means the cessation of operation of Coronado Generating Station (CGS) Unit 1 or Unit 2. During periods of shutdown, the electrostatic precipitators (ESP) for the affected unit(s) shall remain in service until coal fires in the boiler are out or the minimum inlet temperature to the ESP falls below 550 degrees Fahrenheit.

MALFUNCTION

Malfunction means any sudden and unavoidable failure of air pollution control equipment, process equipment or a process to operate in a normal and usual manner, but does not include failures that are caused by poor maintenance, careless operation or any other upset condition or equipment breakdown which could have been prevented by the exercise of reasonable care.

Response 14: Startup: The requested change has been made, with the exception of the last line. Attachment "B", Section I.A.1.a.

Shutdown: The requested change has been made. Attachment "B", Section I.A.1.b

Malfunction: No change is required.

Comment 15: Insignificant Activities

CGS has two 16,000 gallon turbine lube oil storage tanks, one for used oil and one for new oil. Attachment E, Insignificant Activities, source number 14 should be revised to include two lube oil storage tanks.

Response 15: The requested change has been made. Attachment "E", S. No. 14